

ABSTRACT OF THE DISCLOSURE

A scanning exposure apparatus includes an illumination optical system for defining an illumination region, having a slit-like section, on an original with use of laser light from a continuous emission type excimer laser, and a driving device for relatively, scanningly moving an original and a substrate relative to the illumination region. The illumination optical system includes a scanning optical system for scanning a pupil plane of the illumination system with the laser light to produce a secondary light source thereon, such that the illumination region is defined by light from the secondary light source. When the width of the illumination region is W (mm), the scan speed of at least one of the original and the substrate is V (mm/sec), and the time necessary for defining the secondary light source once is T (sec), a relation $W/V = nT$ is satisfied, in which n is an integer.